

Principles of Economics I  
Midterm Exam 1

Dr. Rojas

04/26/2018

Last Name: \_\_\_\_\_. First Name:\_\_\_\_\_.

SID: \_\_\_\_\_.

<b>TA</b>	<b>Section</b>	<b>Indicate your section</b>
Xuanyu (Iris)	C, H	
Byeonghyeon	I, J	
Nan	O, P	
Konstantin	K,	
Fernanda	A, E	
Chris	D	
Yiran	F, N	
Wenyu	B, G	

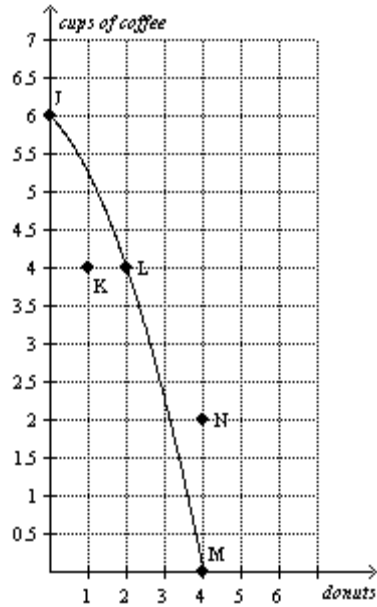
Do not start the exam until instructed to do so.

Please select only one answer.

1. The terms *equality* and *efficiency* are similar in that they both refer to benefits to society. However they are different in that
  - a. equality refers to uniform distribution of those benefits and efficiency refers to maximizing benefits from scarce resources.
  - b. equality refers to maximizing benefits from scarce resources and efficiency refers to uniform distribution of those benefits.
  - c. equality refers to everyone facing identical tradeoffs and efficiency refers to the opportunity cost of the benefits.
  - d. equality refers to the opportunity cost of the benefits and efficiency refers to everyone facing identical tradeoffs.
  
2. Ramona decides to spend two hours taking a nap rather than attending her classes. Her opportunity cost of napping is
  - a. the value of the knowledge she would have received had she attended class.
  - b. the \$24 she could have earned if she had worked at her job for those two hours.
  - c. the value of her nap minus the value of attending class.
  - d. nothing, since she valued sleep more than attendance at class.
  
3. Suppose that a country that has a high level of output per person agrees to trade with a country that has a low level of output per person. Which country can benefit?
  - a. only the one with a low level of output per person.
  - b. only the one with a high level of output per person.
  - c. both
  - d. neither
  
4. Cole is refinishing an antique china cabinet and has already spent \$180 on the restoration. He expects to be able to sell the cabinet for \$360. Cole discovers that he needs to do an additional \$200 worth of work to make the cabinet worth \$360 to potential buyers. He could also sell the cabinet now, without completing the additional work, for \$100. What should Cole do?
  - a. He should sell the cabinet now for \$100.
  - b. He should keep the cabinet since it wouldn't be rational to spend \$380 restoring a cabinet and then sell it for only \$360.
  - c. He should complete the additional work and sell the cabinet for \$360.
  - d. It does not matter which action he takes since the outcome will be the same either way.

5. Lawrence is a photographer. He has \$230 to spend and wants to buy either a flash for his camera or a new tripod. Both the flash and tripod cost \$230, so he can only buy one. This illustrates the principle that
- a. trade can make everyone better off.
  - b. people face trade-offs.
  - c. rational people think at the margin.
  - d. people respond to incentives.
6. Suppose a typical worker in India can produce 32 units of product in an eight-hour day, while a typical worker in Bangladesh can produce 30 units of product in a 10-hour day. We can conclude that
- a. worker productivity in Bangladesh is higher than in India.
  - b. the standard of living will likely be higher in India than in Bangladesh.
  - c. productivity is 4 units per hour for the worker in Bangladesh and 3 units per hour for the worker in India.
  - d. there will be no difference between the standard of living in India and Bangladesh.
7. Production possibilities frontiers are usually bowed outward. This is because
- a. the more resources a society uses to produce one good, the fewer resources it has available to produce another good.
  - b. the opportunity cost of producing a good decreases as more and more of that good is produced.
  - c. of the effects of technological change.
  - d. resources are specialized; that is, some are better at producing particular goods rather than other goods.

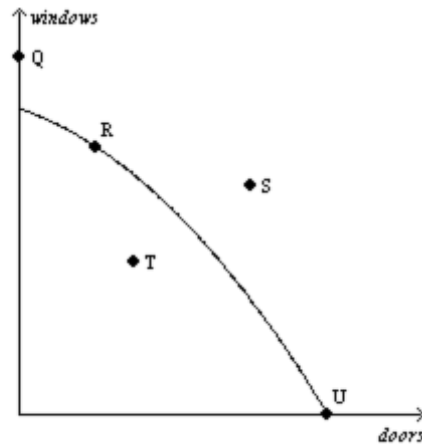
8. Consider the PPF figure below.



The opportunity cost of one cup of coffee is highest when the economy produces

- a. 0 cups of coffee.
  - b. 2 cups of coffee.
  - c. 4 cups of coffee.
  - d. 6 cups of coffee.
9. In the markets for goods and services in the circular-flow diagram,
- a. households provide firms with savings for investment.
  - b. households provide firms with labor, land, and capital.
  - c. firms provide households with output.
  - d. firms provide households with profit.

10. Suppose an economy produces two goods, food and machines. This economy always operates on its production possibilities frontier. Last year, it produced 1000 units of food and 47 machines. This year it experienced a technological advance in its machine-making industry. As a result, this year the society wants to produce 1050 units of food and 47 machines. Which of the following statements is correct?
- a. Because the technological advance occurred in the machine-making industry, it will not be possible to increase food production without reducing machine production below 47.
  - b. Because the technological advance occurred in the machine-making industry, increases in output can only occur in the machine industry.
  - c. In order to increase food production in these circumstances without reducing machine production, the economy must reduce inefficiencies.
  - d. The technological advance reduced the amount of resources needed to produce 47 machines, so these resources could be used to produce more food.
11. Consider the PPF figure below.



Inefficient production is represented by which point(s)?

- a. Q, S
- b. Q, S, T
- c. R, U
- d. T

12. One way to characterize the difference between positive statements and normative statements is as follows:
- a. Positive statements tend to reflect optimism about the economy and its future, whereas normative statements tend to reflect pessimism about the economy and its future.
  - b. Positive statements offer descriptions of the way things are, whereas normative statements offer opinions on how things ought to be.
  - c. Positive statements involve advice on policy matters, whereas normative statements are supported by scientific theory and observation.
  - d. Economists outside of government tend to make normative statements, whereas government-employed economists tend to make positive statements.

13. Consider the Production Opportunities Table below.

	Hours Needed to Make 1 Unit of		Number of Units Produced in 40 Hours	
	Cheese	Wine	Cheese	Wine
England	1	4	40	10
France	5	2	8	20

We could use the information in the table to draw a production possibilities frontier for England and a second production possibilities frontier for France. If we were to do this, measuring wine along the horizontal axis, then

- a. the slope of England's production possibilities frontier would be -4 and the slope of France's production possibilities frontier would be -0.4.
- b. the slope of England's production possibilities frontier would be -0.25 and the slope of France's production possibilities frontier would be -2.5.
- c. the slope of England's production possibilities frontier would be 0.25 and the slope of France's production possibilities frontier would be 2.5.
- d. the slope of England's production possibilities frontier would be 4 and the slope of France's production possibilities frontier would be 0.4.

14. Assume that the rancher and farmer can switch between producing meat and producing potatoes at a constant rate.

	Labor Hours Needed to Make 1 Pound of		Pounds Produced in 24 Hours	
	Meat	Potatoes	Meat	Potatoes
Farmer	6	4	4	6
Rancher	3	8	8	3

Which of the following combinations of meat and potatoes could the rancher *not* produce in 24 hours?

- a. 5 pounds of meat and 1 pounds of potatoes.
- b. 2 pounds of meat and 2 pounds of potatoes.
- c. 1 pounds of meat and 3 pounds of potatoes.
- d. 4 pounds of meat and 1 pound of potatoes.

15. Assume that Zimbabwe and Portugal can switch between producing toothbrushes and producing hairbrushes at a constant rate.

	Machine Minutes Needed to Make 1	
	Toothbrush	Hairbrush
Zimbabwe	3	10
Portugal	5	6

Assume that Zimbabwe and Portugal each has 60 machine minutes available. Originally, each country divided its time equally between the production of toothbrushes and hairbrushes. Now, each country spends all its time producing the good in which it has a comparative advantage. As a result, the total output increased by

- a. 4 toothbrushes and 2 hairbrushes.
- b. 10 toothbrushes and 5 hairbrushes.
- c. 16 toothbrushes and 8 hairbrushes.
- d. 20 toothbrushes and 10 hairbrushes.

16. If labor in Mexico is less productive than labor in the United States in all areas of production,
- a. then neither nation can benefit from trade.
  - b. then Mexico can benefit from trade but the United States cannot.
  - c. then the United States will have a comparative advantage relative to Mexico in the production of all goods.
  - d. then both Mexico and the United States still can benefit from trade.
17. Suppose that a worker in Radioland can produce either 4 radios or 1 television per year, and a worker in Teeveeland can produce either 2 radios or 4 televisions per year. Each nation has 100 workers. Also suppose that each country completely specializes in producing the good in which it has a comparative advantage. If Radioland trades 100 radios to Teeveeland in exchange for 100 televisions each year, then each country's maximum consumption of new radios and televisions per year will be
- a. 100 radios, 300 televisions in Radioland and 300 radios, 100 televisions in Teeveeland.
  - b. 300 radios, 100 televisions in Radioland and 100 radios, 300 televisions in Teeveeland.
  - c. 200 radios, 100 televisions in Radioland and 100 radios, 200 televisions in Teeveeland.
  - d. 300 radios, 100 televisions in Radioland and 100 radios, 400 televisions in Teeveeland.
18. In which of the following cases should the United States produce more noodles than it wants for its own use and trade some of those noodles to Italy in exchange for wine?
- a. Americans know less than Italians know about cooking noodles.
  - b. The United States has an absolute advantage over Italy in producing noodles.
  - c. Italy has a comparative advantage over the United States in producing wine.
  - d. The opportunity cost of producing a gallon of wine is the same for Italy as it is for the United States.
19. Which of the following would most likely serve as an example of a monopoly?
- a. a bakery in a large city
  - b. a bank in a large city
  - c. a local cable television company
  - d. a small group of corn farmers



20. The demand schedule below pertains to sandwiches demanded per week.

Price	Harry's Quantity Demanded	Darby's Quantity Demanded	Jake's Quantity Demanded
\$3	3	4	3
\$5	1	2	x

Suppose Harry, Darby, and Jake are the only demanders of sandwiches. Also suppose the following:

- $x = 2$ .
- The current price of a sandwich is \$5.00.
- The market quantity supplied of sandwiches is 10.
- The law of supply applies to the supply of sandwiches.

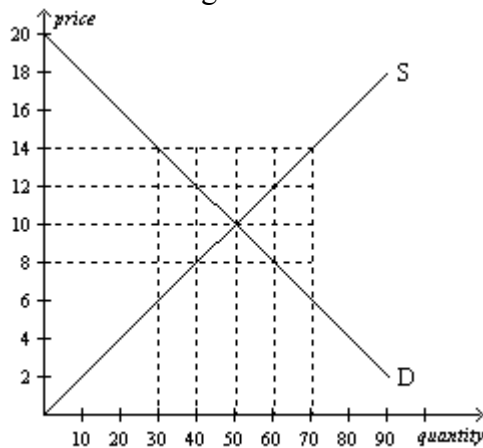
Then there is a

- shortage of 5 sandwiches, and the price would be expected to rise from its current level of \$5.00.
- shortage of 5 sandwiches, and the price would be expected to fall from its current level of \$5.00.
- surplus of 5 sandwiches, and the price would be expected to rise from its current level of \$5.00.
- surplus of 5 sandwiches, and the price would be expected to fall from its current level of \$5.00.

21. Equilibrium quantity must increase when demand

- increases and supply does not change, when demand does not change and supply increases, and when both demand and supply increase.
- increases and supply does not change, when demand does not change and supply increases, and when both demand and supply decrease.
- decreases and supply does not change, when demand does not change and supply decreases, and when both demand and supply increase.
- decreases and supply does not change, when demand does not change and supply decreases, and when both demand and supply decrease.

22. Consider the figure below.



If there is currently a shortage of 20 units of the good, then the law of

- a. demand predicts that the price will rise by \$2 to eliminate the shortage.
- b. supply predicts that the price will rise by \$2 to eliminate the shortage.
- c. supply and demand predicts that the price will rise by \$2 to eliminate the shortage.
- d. supply and demand predicts that the price will fall by \$2 to eliminate the shortage.

23. The market for diamond rings is closely linked to the market for high-quality diamonds. If a large quantity of high-quality diamonds enters the market, then the

- a. supply curve for diamond rings will shift right, which will create a shortage at the current price. Price will increase, which will decrease quantity demanded and increase quantity supplied. The new market equilibrium will be at a higher price and higher quantity.
- b. supply curve for diamond rings will shift right, which will create a surplus at the current price. Price will decrease, which will increase quantity demanded and decrease quantity supplied. The new market equilibrium will be at a lower price and higher quantity.
- c. demand curve for diamond rings will shift right, which will create a shortage at the current price. Price will increase, which will decrease quantity demanded and increase quantity supplied. The new market equilibrium will be at a higher price and higher quantity.
- d. demand curve for diamond rings will shift right, which will create a surplus at the current price. Price will decrease, which will increase quantity demanded and decrease quantity supplied. The new market equilibrium will be at a lower price and higher quantity.

24. Consider the market for portable air conditioners in equilibrium. A summer of unseasonably cool weather would cause
- a. both the equilibrium price and quantity to decrease.
  - b. both the equilibrium price and quantity to increase.
  - c. the equilibrium price to increase and the equilibrium quantity to decrease.
  - d. the equilibrium price to decrease and the equilibrium quantity to increase.
25. What would happen to the equilibrium price and quantity of peanut butter if the price of peanuts went up, the price of jelly fell, fewer firms decided to produce peanut butter, and health officials announced that eating peanut butter was good for you?
- a. Price will fall, and the effect on quantity is ambiguous.
  - b. Price will rise, and the effect on quantity is ambiguous.
  - c. Quantity will fall, and the effect on price is ambiguous.
  - d. Quantity will rise, and the effect on price is ambiguous.